

There is provided a process for manufacturing a semiconductor device <sup>includes defining chip</sup> ~~chip sections 10a is defined on a~~ wafer ~~10~~ by scribe lines ~~13~~ with each chip section ~~10a~~ having chip electrodes ~~11~~ formed thereon. The wafer ~~10~~ is covered with a passivating film ~~12~~ except for on the chip electrodes ~~11~~. Aluminum interconnection layers ~~60~~ are provided such that each layer ~~60~~ is connected to the chip electrode ~~11~~ at one end thereof and the other end of the layer ~~60~~ is extended towards the central portion of the chip section ~~10a~~. A cover coating film ~~64~~ is applied on the passivating film ~~12~~ and the layers ~~60~~. A number of apertures ~~66~~ are formed in the coating film ~~64~~ passing therethrough, and bump electrodes ~~70~~ are formed at the position corresponding to the apertures ~~66~~. The chip sections ~~10a~~ are then separated from each other along the scribe lines ~~13~~ into semiconductor devices ~~80~~.